

## CLAIMS

We claim:

1. A method for interdicting, preventing, palliating, or alleviating a syndrome or a condition of discomfort of a mammalian intestinal or genito-urinary tract resulting from the mammal's consumption of a drug, a food or a beverage comprising administering to the mammal a glycerophosphate moiety attached to an ingestible, dissociable ion in an amount effective to reduce the discomfort to a level which allows the mammal to consume the drug, food, or beverage without substantial discomfort, wherein when the syndrome or condition is interstitial cystitis, the glycerophosphate moiety is not calcium glycerophosphate.
2. The method according to claim 1, wherein the syndrome or condition is selected from the group consisting of irritable bowel syndrome, interstitial cystitis, inflammatory bowel disease, fibromyalgia, urinary urgency, benign prostatic hypertrophy, vulvodynia and external genital pain.
3. The method according to claim 2, wherein the inflammatory bowel disease is selected from the group consisting of colitis, diverticulitis, diverticulosis and Crohn's disease.
4. The method according to claim 1, wherein the ingestible, dissociable ion is calcium.
5. The method according to claim 1, wherein the glycerophosphate moiety is administered orally.
6. The method according to claim 1, wherein the effective amount of glycerophosphate moiety is between about 0.1 gram and about 3.0 grams per dose.
7. A method for interdicting, preventing, palliating, or alleviating causes of pain and symptoms from a disorder of a mammalian intestinal or genito-urinary tract resulting from the mammal's consumption of a drug, a food or a beverage comprising administering to the mammal a glycerophosphate moiety attached to an ingestible, dissociable ion in an amount effective to impede the causes of pain or symptoms to a level which allows the mammal to consume the drug, food, or beverage without substantial pain or symptoms, wherein when the disorder is interstitial cystitis, the glycerophosphate moiety is not calcium glycerophosphate.

8. The method according to claim 7, wherein the disorder is selected from the group consisting of irritable bowel syndrome, interstitial cystitis, inflammatory bowel disease, fibromyalgia, urinary urgency, benign prostatic hypertrophy, vulvodynia and external genital pain.
- 5 9. The method according to claim 8, wherein the inflammatory bowel disease is selected from the group consisting of colitis, diverticulitis, diverticulosis and Crohn's disease.
10. The method according to claim 7, wherein the ingestible, dissociable ion is calcium.
- 10 11. The method according to claim 7, wherein the glycerophosphate moiety is administered orally.
12. The method according to claim 7, wherein the effective amount of glycerophosphate moiety is between about 0.1 gram and about 3.0 grams per dose.
- 15 13. A method for facilitating a smooth muscular operation in a muscle of a mammalian intestinal or genito-urinary tract comprising administering to the mammal an effective amount of a soluble calcium moiety attached to an anion in an amount effective to facilitate a proper and an effective operation of the muscle to a greater or a more optimum degree than that which would have occurred in the absence of the calcium moiety.
- 20 14. The method according to claim 13, wherein the muscular operation is a contraction or a relaxation.
- 15 15. The method according to claim 13, wherein the anion is a glycerophosphate radical.
16. The method according to claim 13, wherein the calcium moiety is administered orally.
- 25 17. The method according to claim 13, wherein the effective amount of calcium moiety is between about 0.1 gram and about 3.0 grams per dose.
18. A method for reducing pain in a mammal suffering from an intestinal or genito-urinary tract disorder comprising administering to the mammal a glycerophosphate moiety attached to an ingestible, dissociable ion in an amount effective to reduce the symptoms and pain to a level below that which would have been experienced in the absence of the

glycerophosphate moiety, wherein when the disorder is interstitial cystitis, the  
glycerophosphate moiety is not calcium glycerophosphate.

19. The method according to claim 18, wherein the disorder is selected from the  
group consisting of irritable bowel syndrome, inflammatory bowel disease, fibromyalgia,  
5 urinary urgency, benign prostatic hypertrophy, vulvodynia and external genital pain.

20. The method according to claim 19, wherein the inflammatory bowel disease is  
selected from the group consisting of colitis, diverticulitis, diverticulosis and Crohn's disease.

21. The method according to claim 18, wherein the ingestible, dissociable ion is  
calcium.

10 22. The method according to claim 18, wherein the glycerophosphate moiety is  
administered orally.

23. The method according to claim 18, wherein the effective amount of  
glycerophosphate moiety is between about 0.1 gram and about 3.0-grams-per-dose.

20 24. A method for neutralizing acid in an organ or a part of a gastrointestinal or  
15 genito-urinary tract of a mammal below a pyloric valve comprising administering to the  
mammal calcium glycerophosphate in an amount effective to increase a pH of the organ or part  
of the gastrointestinal tract to a level greater than it would have been in the absence of the  
calcium glycerophosphate.

25 25. The method according to claim 24 wherein the organ is selected from the group  
20 consisting of an intestine, a urinary bladder, and any organ within an enteric nervous system.

26. The method according to claim 24, wherein the calcium glycerophosphate is  
administered orally.

27. The method according to claim 24, wherein the effective amount of  
glycerophosphate moiety is between about 0.1 gram and about 3.0 grams per dose.

25 28. The method according to claim 24, wherein the calcium glycerophosphate is in a  
form of a tablet or a granulate.

29. A method for relieving acid-sensitive internal epithelial skin or organ irritation  
in a mammal comprising administering to the mammal calcium glycerophosphate in an amount

effective to interdict, prevent, palliate or reduce a tendency of a symptom or a response resulting from the irritation.

5 30. The method according to claim 29, wherein the symptom or the response is selected from the group consisting of pain, a muscle spasm, diarrhea, constipation, burning, bloating, and urinary urgency.

31. The method according to claim 29, wherein the effective amount of calcium glycerophosphate is between about 0.1 gram and about 3.0 grams per dose.

10 32. A method for repairing, assisting, or supporting an anaerobic energy transfer mechanism in a mammal comprising administering to the mammal a glycerophosphate moiety attached to an ingestible, dissociable ion in an amount effective to improve or enhance the energy transfer mechanism of the mammal.

33. The method according to claim 32, wherein the ingestible, dissociable ion is calcium.

15 34. The method according to claim 32, wherein the glycerophosphate moiety is administered orally.

35. The method according to claim 32, wherein the effective amount of glycerophosphate moiety is between about 0.1 gram and about 3.0 grams per dose.